DAKOTA SKIES

NATIONAL WEATHER SERVICE - BISMARCK, NORTH DAKOTA

NWS Bismarck Spring 2014

Inside this issue:

Weather-Ready Nation: Saving Lives and Livelihoods

Welcome Message

by Tony Merriman

Welcome to the Spring edition of the Dakota Skies newsletter! This publication is issued twice each year, once in the spring and once in the fall. The content is produced by a team of meteorologists at the National Weather Service in Bismarck.

This newsletter's purpose is to heighten safety awareness for the coming severe weather season, whether it be summer or winter. Furthermore, other educational and useful information will be provided.

If you have any comments or questions about this publication, please feel free to contact us at 701-250-4224. Enjoy!

Map of the Bismarck County Warning Area (CWA) of responsibility. We issue graphical and text weather products such as warnings and forecasts for 36 counties in western and central North Dakota. The office is staffed 24 hours a day, seven days a week.

Test Tornado Drill - Wednesday, April 30

by Nathan Heinert

The annual statewide test tornado drill for North Dakota will be held on Wednesday, April 30th around 11:15am CDT. A test tornado warning will be issued by the National Weather Service offices in both Bismarck and Grand Forks.

This test will alarm all NOAA Weather Radios and test the Emergency Alert System (EAS) and other communication systems. The level of participation in your community will be determined by your local officials, including whether or not the outdoor sirens will sound. Private companies and schools will also decide the level of participation for their respective facilities.

You are encouraged to use this drill to review your plans at home, work or school in the event of an actual tornado. A tornado safety checklist from the American Red Cross is linked below:

Tornado near Wolf Point, MT on July 15, 2013. *(Source: Deb Rustebakke and Randi Rath)*

http://www.redcross.org/images/MEDIA_CustomProductCatalog/m4340177_Tornado.pdf

NOAA Weather Radio All Hazards acts as an alarm clock for severe weather. It alerts you immediately after a warning has been issued for your area.

"Floods and flash floods are the number one cause of weather-related deaths."

Severe Weather Risk Definitions

Outlook - Issued at least once per day to highlight hazardous weather events that may occur in the next several days.

Watch - Issued when atmospheric conditions are right for severe weather development. Watches are typically valid for a long time (6 hours) and a large area (parts of North Dakota).

Warning - Issued when severe weather has been reported or is imminent. Warnings are typically valid for a short time (1 hour or less) and a small area (a county or smaller).

Severe Summer Weather Awareness Week: April 28-May 2

by Tony Merriman

The purpose of severe summer weather awareness week is to raise awareness about severe weather that could affect North Dakota during the summer months. It is important to understand the different impacts associated with various types of severe weather in order to make informed decisions to better protect your life and property.

The following is a breakdown of the specific type of severe weather highlighted each day during severe summer weather awareness week. Please take a moment to read the severe weather threats, definitions, and safety rules.

Monday, April 28: Severe Thunderstorms

A severe thunderstorm produces 58 MPH or greater wind and/or hail of one inch in diameter (size of a quarter) or greater. Threats associated with severe thunderstorms can be wind damage, lightning, hail, tornadoes, and flooding. The safest place to be when a thunderstorm is approaching is in a sturdy building, away from windows.

Severe Hail *(Source: NOAA)*

Tuesday, April 29: Tornadoes

A tornado is a violently rotating column of air extending from a thunderstorm in contact with the ground. The way you can distinguish a tornado from a funnel cloud or a low cloud is by looking for a dust whirl on the ground.

Tornadoes are divided into 6 categories based on the damage they do. The winds range from a weak EF0 tornado containing winds of 65 to 85 MPH, to a violent EF5 tornado containing winds of 201 MPH or greater. The intensity of the tornado is associated with the damage it causes.

If a tornado is heading your way, go in a basement or a room on the lowest floor of a building with no windows. When driving in open country and no buildings are nearby, exit the vehicle and lay in a ditch with your hands covering your head.

Wednesday, April 30: Test Tornado Warning

Notification of an approaching tornado can be received by a NOAA weather radio. NOAA weather radios relay weather information all day, every day from your local National Weather Service (NWS) Forecast Office. Tornado warnings are just one of the many weather hazards received by NOAA weather radios. A practice tornado warning will be issued by the NWS around 11:15 AM CDT on Wednesday, April 30, 2014, to test communication systems.

Thursday, May 1: Lightning

Lightning is the number two thunderstorm-related killer in the U.S. If you can hear thunder, you are close enough to the storm to be struck by lightning. If lightning threatens your area, get indoors and away from windows as soon as possible. Remember, "When Thunder Roars, Go Indoors!"

Cloud-to-ground and cloud-to-cloud lightning *(Source: NOAA)*

Friday, May 2: Flash Flooding

Floods and flash floods are the number one cause of weather-related deaths. It only takes six inches of fast-moving water to knock you off of your feet, and only two feet of water can cause a car to float. Avoid walking or driving through flooded areas. Remember, "Turn Around, Don't Drown."

SKYWarn Schedule

by JP Martin

SKYWarn is a program where the National Weather Service comes to your community and presents severe weather information. It is fun, educational, and best of all, it is **FREE!**

Sessions are typically between 1-2 hours long with lots of cool video and information.

The topics covered include, but are not limited to:

- Thunderstorm formation, structure, and strength.
- Thunderstorm hazards like wind, hail, flash floods, tornadoes, and lightning
- Reporting severe weather to the NWS
- Severe weather safety

The following is a tentative schedule of SKYWarn training sessions. An up-to-date training calendar can be found under the Top News of the Day headline at

www.weather.gov/bis

A SKYWarn storm spotter is an official volunteer for the National Weather Service who relays vital ground truth information to warning forecasters.

April, 2014 - Upcoming			
Day	**City, State**	**Time**	**Location**
21	**Washburn, ND** (McLean County)	**7:00pm CDT**	Monday - Ambulance Bay - 917 Main Ave in Washburn.
	Contact Information: john.paul.martin@noaa.gov		
22	**Bismarck, ND** (Burleigh County)	**7:00pm CDT**	Tuesday - Sponsored by the CDARC (Central Dakota Amateur Radio Club). This will be more fast paced for HAM Radio Operators or those interested in HAM Radio. Sertoma Club Community Center off of Riverside Park Road near the Dakota Zoo.
	Contact Information: john.paul.martin@noaa.gov		
23	**LaMoure, ND** (LaMoure County)	**7:00pm CDT**	Wednesday - Emergency Response Building - 315 3rd Ave SE in LaMoure.
	Contact Information: michael.mathews@noaa.gov		
23	**Minot, ND** (Ward County)	**7:00pm CDT**	Wednesday - Old Main Theater on the MSU Campus. Campus map: https://www.minotstateu.edu/map/
	Contact Information: corey.king@noaa.gov		
29	**Bismarck, ND** (Burleigh County)	**1:30pm CDT**	Tuesday - Veterans Memorial Library - 515 N 5th Street in Bismarck - lower level auditorium.
	Contact Information: john.paul.martin@noaa.gov		

May, 2014 - Upcoming			
Day	**City, State**	**Time**	**Location**
01	**Medora, ND** (Billings County)	**2:30pm MDT**	Thursday - Billings County Courthouse - in the Courtroom.
	Contact Information: adam.jones@noaa.gov		
01	**Beach, ND** (Golden Valley County)	**6:30pm MDT**	Thursday - Community Ambulance Building - 75 2nd Ave SE in Beach.
	Contact Information: adam.jones@noaa.gov		
02	**Bismarck, ND** (Burleigh County)	**1:00pm CDT**	Friday - United Tribes Technical College - Wellness Center, Bldg. 69, Healing Room
	Contact Information: tony.merriman@noaa.gov		
05	**Hazen, ND** (Mercer County)	**7:00pm CDT**	Monday - Fire Hall - 502 7th Street NE in Hazen.
	Contact Information: nathan.heinert@noaa.gov		
06	**Center, ND** (Oliver County)	**7:00pm CDT**	Tuesday - Betty Hagel Memorial Civic Center - 312 North Lincoln Ave in Center.
	Contact Information: nathan.heinert@noaa.gov		
07	**Carrington, ND** (Foster County)	**7:00pm CDT**	Wednesday - Fire Hall - 1095 1st Street N in Carrington.
	Contact Information: john.paul.martin@noaa.gov		
07	**Scranton, ND** (Bowman County)	**7:00pm MDT**	Wednesday - Community Center - 103 Main Street in Scranton.
	Contact Information: adam.jones@noaa.gov		
08	**Steele, ND** (Kidder County)	**7:00pm CDT**	Thursday - Location to be determined. Not yet set.
	Contact Information: rich.kinney@noaa.gov		

"SKYWarn is fun, educational, and FREE!"

Summer 2014 Climate Outlook

by Michael Mathews

Bismarck Normals

	Avg .	Total
June	64.7°F	2.59"
July	70.4°F	2.58"
August	69.0°F	2.15"

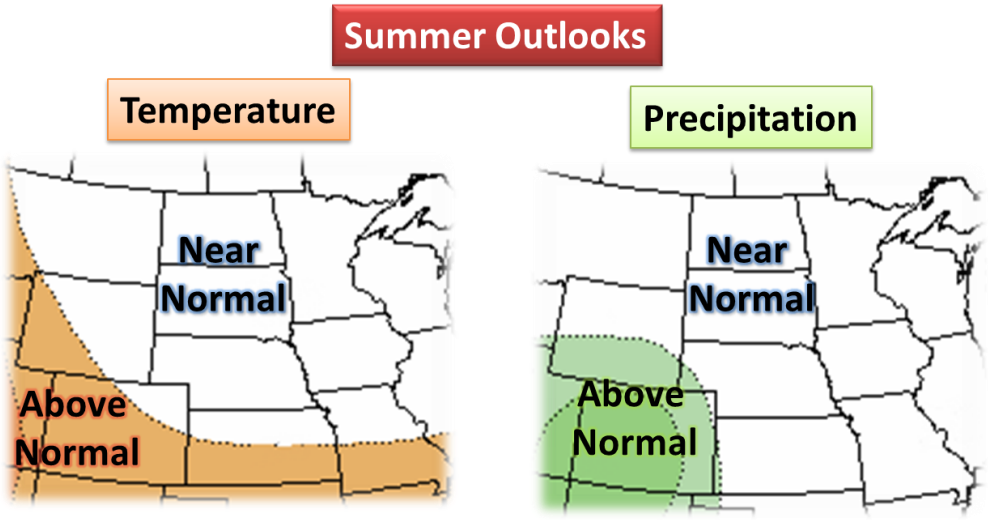
Williston Normals

	Avg. Temps	Total Precip
June	63.7°F	2.36"
July	69.3°F	2.28"
August	68.3°F	1.48"

Bye-bye below normal blue, at least for the summer months of June, July, and August. Near normal temperatures and near normal precipitation is anticipated across North Dakota for this summer. This is the first three month outlook for 2014 that does not have at least some of North Dakota shaded blue for below normal temperatures.

With that said, another climate driver could spoil the near normal outlook for the summer. An El Nino Watch has been issued for the summer and fall of this year. While the development of El Nino is not certain, there is a greater than 50% chance it will occur this summer or fall. Fortunately, El Nino does not govern weather patterns over North Dakota all that much. However, under typical El Nino conditions during the summer, North Dakota does experience slightly cooler than normal temperatures.

When it comes to precipitation during an El Nino summer North Dakota is split down the middle, with the east experiencing drier than normal conditions and the west experiencing wetter than normal conditions.



Stay Connected with NWS Bismarck Social Media Links

by Tony Merriman

The National Weather Service in Bismarck is now on Facebook, Twitter, and YouTube. Whether you are a Facebook fan, Twitter follower, or YouTube subscriber; you can now receive weather updates for western and central North Dakota through either one (or all three) social media outlets.

Our goal is to not only better communicate weather information and impacts, but to also be more interactive with you, the people we serve. We always welcome real-time weather reports via Facebook comments, Twitter replies, or YouTube comments. ***We use your real-time field reports to gain a better understanding of the weather that is happening in your area.*** We integrate your reports into the forecasts with the goal of creating the best and most representative weather forecast for western and central North Dakota.

Together we can provide the most up-to-date and accurate weather information. Become a National Weather Service Bismarck social media fan today!

http://www.facebook.com/US.NationalWeatherService.Bismarck.gov

@NWSBismarck

http://www.youtube.com/user/NWSBismarck

Call for CoCoRaHS observers!

by Tony Merriman

The western and central North Dakota CoCoRaHS rainfall network has over 150 observers! The National Weather Service in Bismarck would like to thank everybody who has joined and report their rainfall and snowfall amounts. We really appreciate the time and effort you put into measuring and reporting your rainfall and snowfall amounts. The data you supply is very valuable not only to meteorologists, but also to researchers.

We would like to continue expanding the network. If you have any friends or relatives who would like to participate, please tell them about the program and have them sign up. Have your friends or relatives fill out the application at the following website:

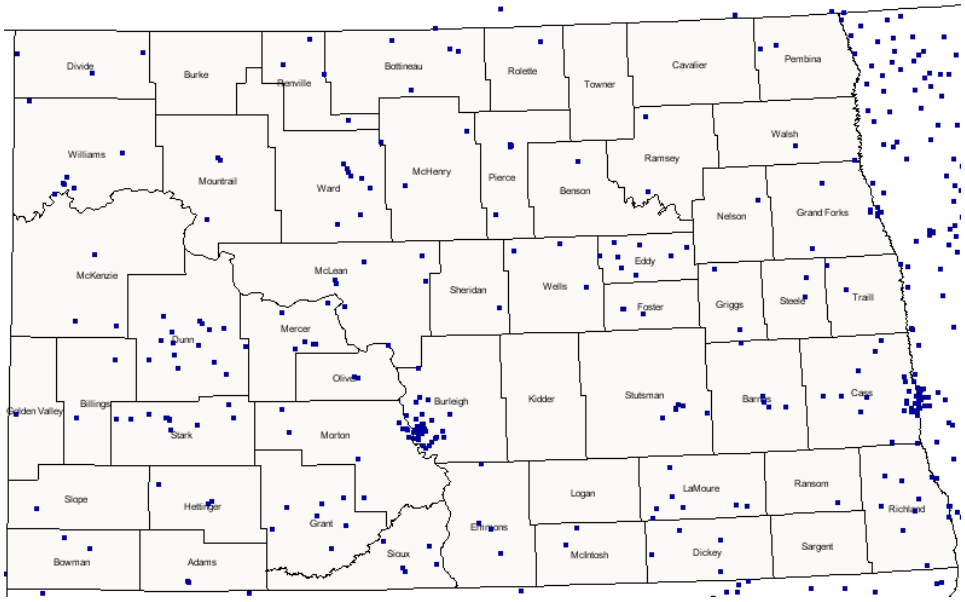
http://www.cocorahs.org/Application.aspx

If you have any questions about the program, please email me at Tony.Merriman@noaa.gov

Thanks again for all your hard work and dedication! We at the National Weather Service really appreciate it!

Standard 4-inch rain gauge used in the CoCoRaHS network

Map of Current North Dakota CoCoRaHS observers



"Because every drop counts."

Staff Spotlight - John Paul Martin

by April Cooper

John Paul Martin is the Warning Coordination Meteorologist (WCM) at the National Weather Service in Bismarck North Dakota. He is the 2014 recipient of The Francis W. Reichelderfer award, which is given in recognition of distinguishing contributions to operational environmental services to the public.

John Paul was honored for his dedication to public service and for demonstrating the highest levels of leadership through the NWS decision support services. Through outstanding community outreach, he has led the way in Sky Warn awareness and Storm Ready preparedness. Ensuring communities are equipped with the knowledge to handle adverse weather safely and efficiently. In Bismarck's County Warning Area (CWA) there are 30 Storm Ready sites; this includes 1 Native American tribe and 2 universities. An absolute Storm Ready CWA is the ultimate goal.

John Paul's exceptional commitment to the public is rooted in the enjoyment of educating others on weather awareness. His journey as a WCM has allowed him to provide guidance and decision support to numerous community members throughout North Dakota.

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National Weather Service Mission Statement:

The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

Brief National Weather Service History:

The National Weather Service has its beginnings in the early history of the United States. Weather has always been important to the citizenry of this country, and this was especially true during the 17th and 18th centuries. The beginning of the National Weather Service we know today started on February 9th, 1870, when President Ulysses S. Grant signed a joint resolution of Congress authorizing the Secretary of War to establish a national weather service.

ON THE WEB!

www.weather.gov/bis

Farewell to Rich Kinney

by Tony Merriman

Rich will be transferring to Davenport, Iowa as a Lead Forecaster this summer.

Rich has been a Lead Forecaster in Bismarck since August 2009. He began his National Weather Service career in Davenport, Iowa in 1998 as a Meteorologist in Training, before moving on to Des Moines, Iowa as a General Forecaster in 2002.

Rich was born in Red Oak, Iowa and grew up in several communities in Iowa and Illinois. He attended the University of Iowa and earned a Bachelor of Science degree in Journalism and Mass Communication. He then worked for several years in the radio industry as a News and Sports Director.

Rich decided to undertake a career change and earned a Bachelor of Science degree in Meteorology, graduating from Western Illinois University with honors in 1996. He worked at a private weather firm before beginning his career in the National Weather Service.

He will be missed by all of the NWS Bismarck staff. We wish him the best of luck as he begins a new chapter in Davenport!